EX PARTE OR LATE FILED

ANNE GOODWIN CRUMP VINCENT J. CURTIS, JR. THOMAS J. DOUGHERTY, JR. JAMES G. ENNIS PAUL J. FELDMAN RICHARD HILDRETH EDWARD W. HUMMERS, JR. FRANK R. JAZZO BARRY LAMBERGMAN PATRICIA A. MAHONEY GEORGE PETRUTSAS ROBERT D. PRIMOSCH LEONARD R. RAISH JAMES P. RILEY MARVIN ROSENBERG LONNA M. THOMPSON KATHLEEN VICTORY HOWARD M. WEISS

FLETCHER, HEALD & HILDRETH

ATTORNEYS AT LAW

SUITE 400, 1225 CONNECTICUT AVENUE, N.W.

WASHINGTON, D.C. 20036-2679

P. O. BOX 33847

WASHINGTON, D.C. 20033-0847

(202) 828-5700

TELECOPIER NUMBER

(202) 828-5786

October 22, 1992

FRANK ROBERSON (1936-1961)

RETIRED

BSELL ROWELL ARD F. KENEHAN NK U. FLETCHER

> OF COUNSEL EDWARD A. CAINE

TELECOMMUNICATIONS CONSULTANT HON. ROBERT E. LEE

WRITER'S NUMBER

(202) 828-

5780

RECEIVED

OCT 2 2 1992

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

Dear Sir/Madam:

The Secretary

Federal Communications Commission

1919 M Street, N.W., Room 222

Washington, D.C. 20554

The attached Memorandum of Ex Parte Discussion is forwarded for inclusion in FCC Docket ET 92-100/.

Very truly yours,

FLETCHER, HEALD & HILDRETH

Leonard Robert Raish

Counsel for Spectralink

Corporation

LRR:cej Attachment

> No. of Copies rec'd ListABCDE

EX PARTE OR LATE FILED

ANNE GOODWIN CRUMP VINCENT J. CURTIS, JR. THOMAS J. DOUGHERTY, JR. JAMES G. ENNIS PAUL J. FELDMAN RICHARD HILDRETH EDWARD W. HUMMERS, JR. FRANK R. JAZZO BARRY LAMBERGMAN PATRICIA A. MAHONEY GEORGE PETRUTSAS ROBERT D. PRIMOSCH LEONARD R. RAISH JAMES P. RILEY MARVIN ROSENBERG LONIA M. THOMPSON KATHLEEN VICTORY HOWARD M. WEISS

FLETCHER, HEALD & HILDRETH

ATTORNEYS AT LAW

SUITE 400, 1225 CONNECTICUT AVENUE, N.W.

WASHINGTON, D.C. 20036-2679

P. O. BOX 33847

WASHINGTON, D.C. 20033-0847

(202) 828-5700

TELECOPIER NUMBER (202) 828-5786

PAUL D.P. SPEARMAN (1936-1962) FRANK ROBERSON (1936-1961)

RETIRED

RUSSELL ROWELL EDWARD F. KENEHAN ROBERT L. HEALD FRANK U. FLETCHER

> OF COUNSEL EDWARD A. CAINE

EDWARD A. CAIRE

TELECOMMUNICATIONS CONSULTANT HON. ROBERT E. LEE

WRITER'S NUMBER (202) 828-

RECEIVED

OCT 2 2 1992

MEMORANDUM OF EX PARTE DISCUSSION

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

On October 6, 1992 at 9:30 A.M. Messrs. Tom Ohlsson and L.R. Raish met Dr. Thomas Stanley (FCC Chief Engineer) on behalf of the Spectralink Corporation. The Spectralink Corporation manufactures and sells a pocket telephone system operating in the 902-928 MHz band under Part 15, Section 247 of the FCC Rules.

The purpose of the meeting was to provide Dr. Stanley with an overview of the Spectralink 2000 pocket telephone system. The discussion at the meeting was based on the attached presentation charts. The meeting lasted for approximately twenty minutes.

A copy of this Memorandum along with the attached charts is being forwarded to The Secretary, FCC for inclusion in Docket ET 92-100.

Respectfully submitted,

ferd Rouse

Leonard Robert Raish Counsel for Spectralink

cc: Dr. Thomas Stanley

Mr. Tom Ohlsson

SpectraLink PCS 2000 Wireless PBX Adjunct Technology Overview

- Operates under Part 15, Section 247 Rules
- 902-928 MHz, frequency hopping spread spectrum
- 50 channels used, 100 channels / sec. hopping rate
- 288 kb / sec. data rate for four TDMA speech assignments
- TDD used for full duplex operation
- GMSK modulation



SpectraLink PCS 2000 Operational Benefits

- Operates in available Part 15 bandwidth (902 928 MHz)
- Frequency hopping spread spectrum transmission
 - Minimum likelihood of causing interference
 - Minimum susceptibility to interference from ISM users and others (military, AVM)
- Very low power (100 mW peak, 10 mW average)
 - Allows distributed cellular coverage
- · Inherently secure operation
 - 24 Kb / sec. ADPCM voice coding
 - FH/SS
 - Digital modulation
 - Optional encryption



SpectraLink PCS 2000 Product Highlights

- First commercial wireless, cellular PBX adjunct operating under Part 15
- Part 15 certification granted May 18, 1992
- Part 68 certification granted August 7, 1992
- 18 systems installed to date
 - 350 base stations
 - 1000 handsets
- Capacity to support large installations
 - 2000 handsets
 - 300 + base stations
 - More than 4 million sq. ft. coverage



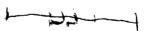
SpectraLink PCS 2000 User-PCS Issues

- Operation in 902 928 MHz unaffected by outcome of 92-100 & 92-9 Dockets.
- Direct Sequence CDMA limited to 26 MHz bandwidth is unreliable in absence of sophisticated signal processing.
- Listen Before Talk will likely preclude certain design implementations in 1910-1930 MHz band.
- Open entry to entire 1910-1930 MHz band will allow timely product availability, but will result in significant interference potential.



SpectraLink PCS 2000 User-PCS Issues

- Segregating voice and data users to different portions of the spectrum minimizes complexity of implementing LBT.
- · 5 MHz will not deliver primary phone support.
- Estimated that 15-20 MHz dedicated spectrum is necessary for primary phone support.



SpectraLink PCS 2000 User Benefits

- Improve productivity
- Reduce operating expenses
- Reduce telecommunications expenses
- Improve responsiveness
- Improve image



SpectraLink PCS 2000 Applications

- Distribution Centers
- Facility support
- Hospitals
- Disaster planning
- Office environment
- Temporary agency set up
- Service and support centers

